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23 UNITED STATES DISTRICT COURT
24 CENTRAL DISTRICT OF CALIFORNIA
25 EASTERN DIVISION – RIVERSIDE

26 G. DAVID JANG, M.D.,

27 Plaintiff,

28 v.

29 BOSTON SCIENTIFIC
30 CORPORATION, a Delaware
31 Corporation; SCIMED LIFE SYSTEMS,
32 INC., a Minnesota Corporation,

33 Defendants.

Case No. EDCV 05-00426 VAP (SGLx)

JOINT STATEMENT OF PLAINTIFF G.
DAVID JANG, M.D. AND
DEFENDANTS BOSTON SCIENTIFIC
CORPORATION AND SCIMED LIFE
SYSTEMS, INC. REGARDING CLAIM
TERMS AND PROPOSED
CONSTRUCTIONS

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CENTRAL DISTRICT OF CALIF.

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For the convenience of the Court, plaintiff G. David Jang, M.D. ("Dr. Jang"), and defendants Boston Scientific Corporation and SciMed Life Systems, Inc. (collectively, "BSC"), respectfully submit this Joint Statement Regarding Claim Terms and Proposed Constructions concerning the patents-in-suit, U.S. Patent Nos. 5,922,021 and 5,954,743.

CLAIM TERMS REQUIRING CONSTRUCTION

I. Claim Terms For Which the Parties Have Agreed On Construction

<u>Claim Terms To Be Constructed</u>	<u>Agreed Upon Construction</u>
<i>strut</i>	a structural member designed to withstand force
<i>joining strut</i>	a strut that couples two adjacent expansion struts within an expansion strut column
<i>plurality</i>	two or more
<i>the first connecting strut intermediate section being non-parallel to the first connecting strut proximal and distal sections</i>	the intermediate section of the first connecting strut is not parallel to the proximal and distal sections of the first connecting strut
<i>adjacent</i>	next in a series

II. Claim Terms For Which Dr. Jang Is Proposing A Construction, But BSC Believes Do Not Need Construction

<u>Claim Terms To Be Constructed</u>	<u>Dr. Jang's Proposed Construction</u>
<i>comprising....</i>	the named elements are essential, but additional elements may be added and still form a device within the scope of the claim. For example, in a claim that describes an invention "comprising" elements A, B and C, each of those three elements must be present, but element D may also be present.
<i>column</i>	a vertical extension of space around the circumference of the stent

Claim Terms To Be Construed	Dr. Jang's Proposed Construction
<i>longitudinal axis</i>	an imaginary line running lengthwise through the center of an object. For example, the longitudinal axis of a stent is an imaginary line running lengthwise through the center of the stent.

III. Claim Terms For Which The Parties Are Proffering Competing Constructions

Claim Terms to Be Construed	Dr. Jang's Proposed Construction	BSC's Proposed Construction
<i>expansion strut</i>	a strut that extends at least in part in the direction of the longitudinal axis of the unexpanded stent	a strut in an expansion column
<i>expansion strut pair</i>	a pair of adjacent expansion struts, coupled at one end by a joining strut	a combination of two circumferentially adjacent expansion struts coupled at one end by a joining strut and open at the other
<i>expansion column</i>	a vertical extension of space around the circumference of the stent formed by two or more expansion strut pairs	a tubular structure formed solely by a plurality of expansion strut pairs arranged in a column along the circumference of the stent
<i>proximal</i>	to the left when viewing the stent from a horizontal perspective	closer to the operator once the stent has been mounted on the catheter
<i>distal</i>	to the right when viewing the stent from a horizontal perspective	further from operator once the stent has been mounted on the catheter
<i>connecting strut</i>	a strut that couples an expansion strut pair in one expansion column with an expansion strut pair in another expansion column	a strut that connects adjacent expansion columns
<i>connecting strut column</i>	a vertical extension of space around the circumference of the stent formed by two or more connecting struts	formed solely of a plurality of connecting struts unattached to each other and arranged in a column along the circumference of the stent

Claim Terms to Be Construed	Dr. Jang's Proposed Construction	BSC's Proposed Construction
... the first expansion strut of the first expansion strut pair...has a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair...	the specified expansion struts (the first expansion strut of the first expansion strut pair and the first expansion strut of the second expansion strut pair) have longitudinal axes that are circumferentially offset from each other	the first expansion strut of the first expansion pair in the first expansion column is circumferentially offset from the first expansion strut of the second expansions strut pair in the second expansion column
radius of curvature	a mathematical measurement of the curvature of a curve; specifically, the reciprocal of the curvature of a curve	a smooth curve

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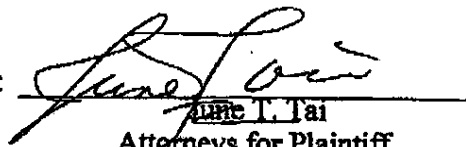
1 Dated: May 5, 2006

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PROOF OF SERVICE

I, Sandra Kowalski, declare as follows:

I am employed in the County of Los Angeles, State of California; I am over the age of eighteen years and am not a party to this action; my business address is 333 South Grand Avenue, Los Angeles, California 90071-3197, in said County and State. On May 5, 2006, I served the following document(s):

**JOINT STATEMENT OF PLAINTIFF G. DAVID JANG, M.D. AND
DEFENDANTS BOSTON SCIENTIFIC CORPORATION AND SCIMED LIFE
SYSTEMS, INC. REGARDING CLAIM TERMS AND PROPOSED
CONSTRUCTIONS**

on the parties stated below, by placing a true copy thereof in an envelope addressed as shown below by the following means of service:

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- ☒ **BY MAIL:** I placed a true copy in a sealed envelope addressed as indicated above, on the above-mentioned date. I am familiar with the firm's practice of collection and processing correspondence for mailing. It is deposited with the U.S. Postal Service on that same day in the ordinary course of business. I am aware that on motion of party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.
- ☒ **BY PDF FORMAT:** I caused each such document to be transmitted by PDF Format, to the parties and e-mail addresses indicated above
- ☐ **(STATE)** I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.
- ☒ **(FEDERAL)** I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 5, 2006.


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UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
EASTERN DIVISION - RIVERSIDE

G. DAVID JANG, M.D.,

Plaintiff,

v.

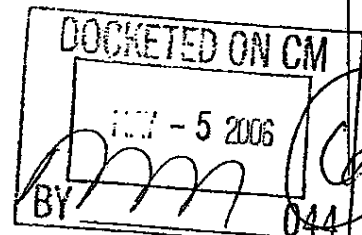
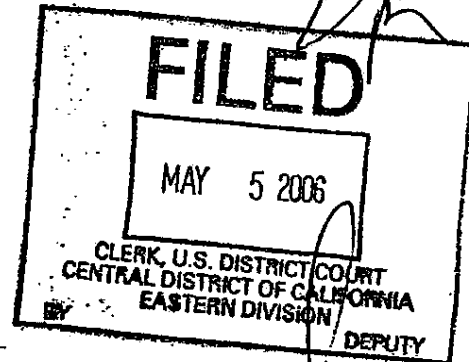
BOSTON SCIENTIFIC
CORPORATION, a Delaware
Corporation, and SCIMED LIFE
SYSTEMS, INC., a Minnesota
Corporation,

Defendants.

Case No. ED CV 05-00426 VAP
SGLx

DEFENDANTS BOSTON
SCIENTIFIC CORP.'S AND
SCIMED, INC.'S OPENING
CLAIM CONSTRUCTION
BRIEF

May 30, 2006 *Markman* Hearing



BOSTON SCIENTIFIC
CORPORATION, a Delaware
Corporation, and SCIMED LIFE
SYSTEMS, INC., a Minnesota
Corporation,

Counterclaimants,

v.

G. DAVID JANG, M.D.,

Counterdefendant.

Case No. ED CV 05-00426 VAP
SGLx

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1 Pursuant to the Court's Scheduling Order, Defendants Boston Scientific
2 Corporation and SciMed Life Systems, Inc. ("SciMed") (collectively, "Boston
3 Scientific") respectfully submit this memorandum concerning the construction of
4 the asserted claims.

5
6 **I. PRELIMINARY STATEMENT**

7 This case involves "stents," which are tubes that are inserted into blood
8 vessels and expanded to keep the vessels open.¹ Fundamental tenets of stent
9 design preclude Dr. Jang's proposed interpretations of the disputed claim terms of
10 U.S. Patent No. 5,922,021 ("the '021 patent") (Nilsson Decl. Ex. A)² and U.S.
11 Patent No. 5,954,743 ("the '743 patent") (Nilsson Decl. Ex. B).³ Both prior art
12 patents and the Jang patents rely on a basic distinction between the "expansion
13 columns" – rings of metal that create a scaffold to support the vessel wall, and the
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17 ¹ Although a stent can be used in any vessel (including bile ducts and the urethra,
18 as well as blood vessels) (Squire Decl. ¶ 8), the Jang patents concern only blood
19 vessels, so any reference in this brief to "stents" will be to endovascular stents (*i.e.*,
20 stents for use in blood vessels).

21 ² Exhibits referenced in this brief are attached the Declaration of John Nilsson in
22 Support of Defendants' Opening Claim Construction Brief (or "Nilsson Decl."),
which has been filed contemporaneously herewith.

23 ³ The applications that issued as the '743 patent and the '021 patent were both
24 based upon Provisional Application No. 60/017,484 ("the '484 application").
25 Thus, the issued patents share, almost entirely, the same w description and Figures,
26 as well as many of the same elements and claim terms. The parties agree that a
27 claim term appearing in the '021 patent will have the same meaning to the extent
28 that it appears in the '743 patent and vice versa. Thus, where there are no material
distinctions at play, Boston Scientific will refer to the '021 patent and the '743
patent collectively as "the Jang patents."

1 “connecting columns” – which connect the expansion columns. In the expansion
2 columns, the structural members (or “struts”) are attached to each other along the
3 circumference of the stent so that, upon expansion of the stent, they can expand
4 together to resist recoil from the vessel wall. The “connecting struts” that form
5 “connecting columns,” on the other hand, are not attached to each other
6 circumferentially or otherwise; instead, each connecting strut connects the
7 “expansion columns” on either side of it. Simply put, if the “connecting columns”
8 were formed of struts attached circumferentially, they would function as
9 “expansion columns.” This taxonomy applies equally to the prior art and to the
10 Jang patents.
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14 While many *Markman* proceedings involve an intense and belabored
15 examination of the arcane details of a patent and subtle differences between the
16 invention claimed in the patent and the prior art, no such examination is required
17 here. In an attempt to obtain more than the \$60 million already received from
18 Boston Scientific, Dr. Jang has proposed interpretations of his claims that would
19 erase this crucial distinction between the expansion columns and connecting
20 columns. Dr. Jang’s approach is not only improper as matter of claim
21 construction, but would also have the impermissible effect of broadening the
22 coverage of the Jang patents to encompass prior art stent patents, thus undermining
23 the validity of the Jang patents. For these and other reasons set forth below, Dr.
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1 Jang's proposed claim constructions should be rejected in favor of the claim
2 constructions proposed by Boston Scientific.

3 4 II. BACKGROUND

5 A "stent" is a tube that is inserted into a blood vessel to keep the vessel
6 open, in connection with the treatment of blocked or narrowed blood vessels.⁴
7 (Squire Decl. ¶ 8.) The stent acts as a scaffold to prop open what previously was
8 an occluded portion of the vessel or artery. *Id.* ¶ 10. The first expandable stents
9 were developed in the 1970s and 1980s.⁵ Some of these stents were coiled, spring-
10 like devices made of an alloy that expanded upon exposure to the heat of the body.
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14 ⁴ These blockages, or partial blockages, can arise as the result of the
15 accumulation of cholesterol and other debris on the inside of the arteries, a
16 condition known as atherosclerosis. (Squire Decl. ¶ 9.) If the occlusion is not too
17 severe, the physician may use a device called a balloon catheter (a small, hollow,
18 flexible tube that has a balloon near the end of it) to perform a "balloon
19 angioplasty." *Id.* In these procedures, the catheter is inserted through an artery
20 (usually near the groin), and threaded to the site of the occlusion, where the
21 balloon is inflated, widening the blocked vessel and restoring blood flow. *Id.*
22 Vessels treated with balloon angioplasty often re-close some time after the
procedure, a condition known as "restenosis." *Id.* Stents are used to prevent
restenosis (although they are not always successful in this regard, as noted below).
Id. ¶ 10.

23 ⁵ The first stents, such as those developed by Charles Dotter in the 1960s, were
24 not expandable. Michael Kutryk & Patrick Serruys, CORONARY STENTING:
25 CURRENT PERSPECTIVES 1 (2000) (Nilsson Decl. Exhibit C). These stents were
26 pushed into the vessel or artery with a catheter (a thin surgical instrument that can
27 be threaded through a main artery to the diseased vessel). *Id.* Because these stents
28 were the same size before implantation as after implantation, they often were
dislodged because they did not adjust to the diameter of the destination vessel or
artery. *Id.*

Other spring-like stents were compressed by torque then allowed to expand upon release of that tension. Michael Kutryk & Patrick Serruys, CORONARY STENTING: CURRENT PERSPECTIVES 2 (2000) (Nilsson Decl. Ex. C).

A. The Prior Art Stents

In the 1980s, Julio Palmaz developed a balloon-mounted expandable stent. Kutryk & Serruys, *supra*, at 2. This stent was constructed of a wire mesh with a diamond pattern and was mounted on a balloon catheter. *Id.* The struts in each diamond expanded (or spread part) as the balloon was expanded, widening the diameter of the stent. After the balloon was deflated and the balloon catheter removed, the expanded stent remained in place to keep the vessel open. *Id.* at 2-4. Figure 1 below shows a schematic depiction of the unexpanded and expanded Palmaz stent. The red high-lighting shows the expanding struts attached together in a ring of diamonds around the circumference of the stent.

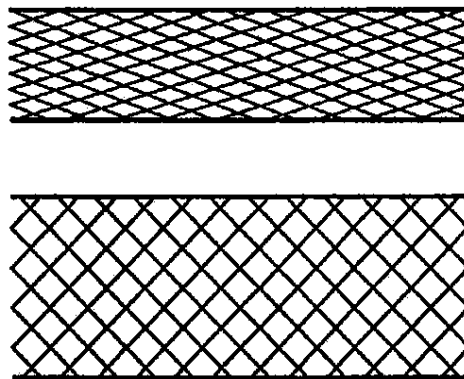


Figure 1 – The Palmaz Balloon Expandable Stent⁶

⁶ Kutryk & Serruys, *supra*, at 6.

1 As the Jang patents themselves describe, these early balloon-expandable
2 stent designs suffered from a number of drawbacks. For one thing, the stents did
3 not readily adjust along their lengths to varying diameters in the vessel walls. *See*
4 '021 patent, col. 2, line 63 (noting that prior art stents suffered from "constant
5 expanded stent diameter"). A related problem inherent in a design of meshed
6 expansion struts was a lack of flexibility in the unexpanded stent. *See* '021 patent,
7 col. 2, lines 59-60 (noting that prior art stents suffered from "inability to negotiate
8 bends in vessels due to columnar rigidity of the unexpanded stent").
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12 Palmaz (and other prior art stents) attempted to address foreshortening by
13 breaking the stent into expanding, rectangular slots linked by connecting struts or
14 connecting members. In the figure below (which is from U.S. Patent No.
15 5,102,417, attached as Exhibit D to the Nilsson Declaration), the expanding
16 elements in the Palmaz articulated stent are highlighted in red; and the connecting
17 struts or connecting members are highlighted in blue.
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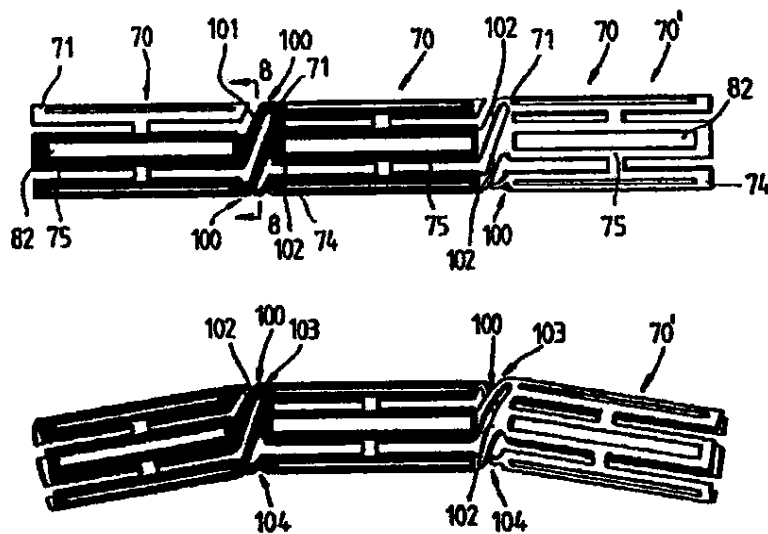
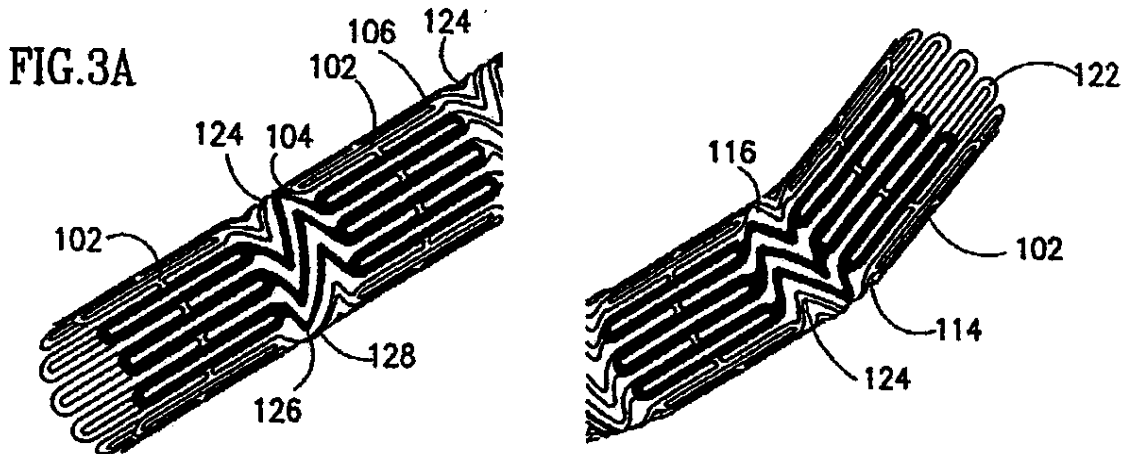


Figure 2 – The Palmaz Articulated Stent With Connecting Members

As Figure 2 illustrates, the expanding elements in the Palmaz articulated stent were joined circumferentially in order to form tubular segments that expanded with the balloon. The connecting members, however, were not attached to each other circumferentially; rather, they were only attached on their ends to the expanding slots because their purpose was to connect the expansion segments of the stent. The manner in which the circumferentially connected expanding slots spread apart is shown below:



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Figure 4 – Pinchasik Articulated Stent

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The above diagram from Pinchasik illustrate precisely why connecting members in a connecting column are not attached to one another. If they were, they would become rigid, like the tubular expansion segments, thereby defeating the purpose behind their development, which was to allow for a more flexible stent.

Other prior art stents experimented still further with both the shape of the expansion segment and the shape of the connecting member. For example, U.S. Patent No. 5,697,971 ("Fischell") (Nilsson Decl. Ex. F) employed "S-shape" connecting members as well as short, straight connectors. As shown in the figure below, these connecting members were attached at each end to expansion struts that were closed on one end and open at the other, and which were attached circumferentially to form expansion columns. The connecting members, on the other hand, were unattached to each other.

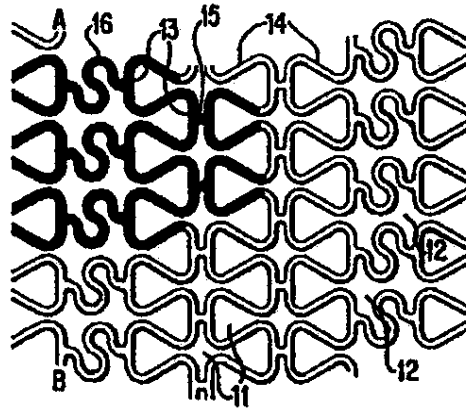


FIG. 2

Figure 5 – Fischell's Connecting Members

Other prior art stents experimented with designs in which connecting struts overlapped with expansion columns along the longitudinal axis of the stent. For example, U.S. Patent No. 5,591,197 ("Orth") (Nilsson Decl. Ex. G) disclosed a stent comprised of "cylindrical elements that are interconnected to each other by a plurality of connecting members," with the connecting struts joining the closed end of an expansion pair to the open end of the adjacent expansion pair. Col. 3, lines 60-62. Again, the "connecting members" were not attached to one another.

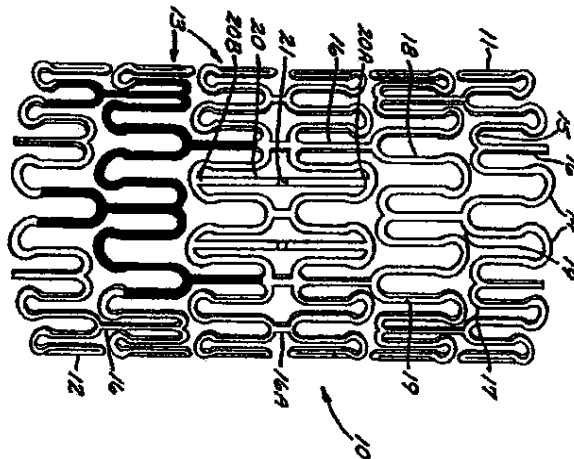


Figure 6 – Orth

Another prior art stent, U.S. Patent No. 5,514,154 ("Lau") (Nilsson Decl. Ex. H), used a comparatively small number of short connecting members to link expansion columns, as shown below. Again, the connecting members were not attached to each other.

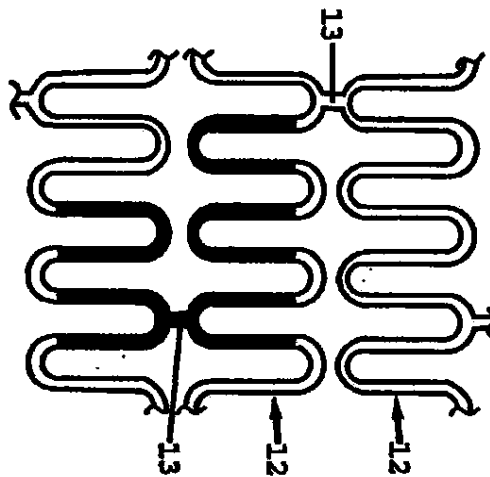


Figure 7 – The Lau Prior Art Stent

In sum, the prior art was replete with stents employing expansion segments, (and, in some cases, expansion columns), interconnected by a variety of kinds of connecting members, or struts. All of these stents, however, shared a common feature: in every case, the connecting members were not attached to each other; instead they connected the expansion elements (or expansion columns) on either side.

B. The Jang Patents

In April of 1996, Dr. Jang filed a provisional patent application describing an articulated stent with expansion columns, composed of expansion pairs, coupled by connecting columns, composed of connecting struts. The stent described and

1 claimed in the Jang patents possessed a number of novel features. For example the
 2 stent claimed in claim 1 of the '021 patent and claim 1 of the '743 patent (both of
 3 which are asserted here) employed linked expansion pairs that were
 4 circumferentially offset from one another. Similarly, the stent of claim 1 of the
 5 '021 patent claimed a connecting strut with intermediate sections that were non-
 6 parallel to their end sections. Each of these elements is show in the Figure below
 7 (which is Figure 9D in the '021 patent).

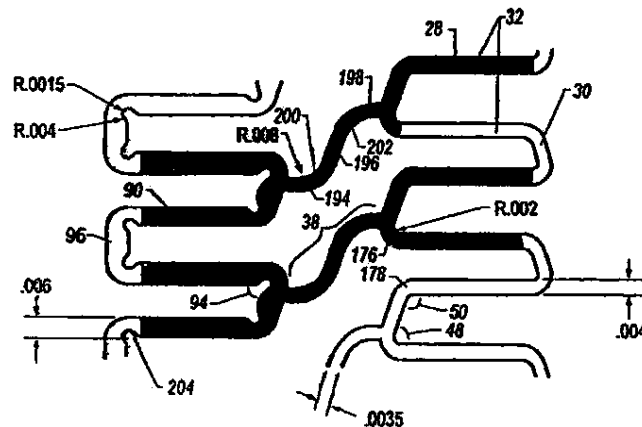


Fig. 9D

Figure 8 ('021 Patent Figure 9D)

19 In other ways, however, the stent described and claimed in the Jang patents
 20 shared certain basic elements of stents in the prior art. In particular, like the prior
 21 art stents discussed above, Dr. Jang's stent employed expansion columns joined
 22 together circumferentially to provide a scaffolding. And like the prior stents
 23 described above, these expansion columns are longitudinally joined together by
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connecting members that were not attached to each other – as shown in the Figure below (which is from Figure 2A of the '021 patent).

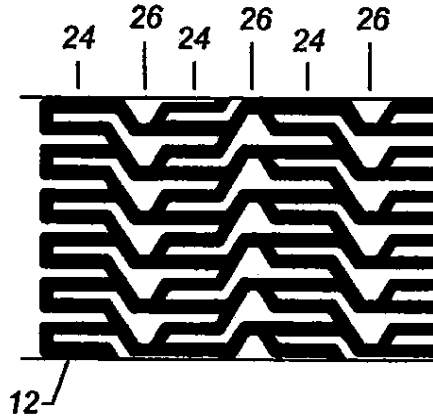


Figure 9 – Jang's Expansion Columns and Connecting Strut Columns

C. BSC's Purchase Of The Jang Patents

In 2001, Boston Scientific began negotiations with Dr. Jang concerning the purchase of his existing and future patents, patent applications, and other intellectual property – including the patents at issue here. In consideration for the assignment of these rights, Boston Scientific made an immediate payment to Dr. Jang of \$50 million. Boston Scientific chose not to commercialize the stent described and claimed in the Jang patents, choosing instead to develop and sell a stent closer to that described in the Lau patent, to which Boston Scientific also obtained rights. Because it did not commercialize a stent covered by the Jang patents – which would have required Boston Scientific to make additional royalty payments to Dr. Jang – Boston Scientific subsequently made an additional \$10 million payment to Dr. Jang, as required under the Assignment Agreement. In

1 apparent recognition that his patents did not cover Boston Scientific's stents – with
2 which he was intimately familiar – Dr. Jang accepted the additional \$10 million
3 payment.
4

5 Nonetheless, unsatisfied with the \$60 million in payments made to him, Dr.
6 Jang now takes the position in this litigation that the '021 patent and the '743
7 patent cover a stent commercialized by Boston Scientific – the “Express” stent. In
8 taking this position, Dr. Jang has proposed a radically overbroad construction of
9 his patent claims, one that would widen the definition of “connecting strut” and
10 “connecting column” to include any metal between two expansion pairs, regardless
11 of whether it is otherwise indistinguishable from an expansion strut or expansion
12 strut pair.
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14

15 In April, Dr. Jang revised his previous interrogatory responses on the issue
16 to make it plain that he was only asserting two independent claims from the Jang
17 patents in this case: claim 1 of the '021 patent and claim 1 of the '743 patent.
18 Although they differ in certain respects, each claim includes a number of common
19 elements, such as:
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21

- 22 • A stent composed of “expansion columns” and “connecting strut
23 columns”;
- 24 • “Expansion columns” comprised of “expansion strut pairs”;
- 25 • “Expansion strut pairs” formed of adjacent expansion struts, coupled
26 by a joining strut;
- 27 • “Connecting columns” comprised of “connecting struts”; and
28

- A first expansion strut of the first expansion strut pair having “a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair” in the second expansion column.

In addition, there are a handful of other terms that require construction.

Nonetheless, the crux of the parties’ claim construction dispute centers on the meaning of “expansion column” vis-à-vis “connecting strut column.”

III. ARGUMENT

Dr. Jang proposes that an “Expansion Column” is merely “a column of expansion strut pairs” and that may contain other kinds of struts and that it need not even perform the necessary task of propping open the vessel wall. Dr. Jang further proposes that the “Connecting Strut Column” can contain “expansion struts” as well as “connecting struts,” and that the “connecting struts” in the “connecting strut column” may be attached to one another.

As their owner, Boston Scientific clearly has no interest in advocating an unduly narrow construction of the Jang patents.⁷ Nonetheless, Dr. Jang’s proposed claim construction is untenable and finds absolutely no basis in the Jang patents. Every single embodiment described in the Jang patents and every single depiction of the Jang stent in the Jang patents discloses and shows “connecting strut

⁷ Indeed, Boston Scientific is currently asserting the Jang patents against multiple parties in separate litigations.

columns” with “connecting struts” unattached to one another. As reflected over and over in the prior art, this is a fundamental distinction between an expansion column or segment (whose members are attached to each other to provide radial support) and a connecting column or segment (whose members are not attached to each other, but rather connect the expansion columns). Dr. Jang’s proposed construction would collapse this basic distinction between an expansion column and a connecting column and, in so doing, broaden the claims so radically that they would cover the prior art, and thus be invalid.

A. Dr. Jang’s Proposed Constructions Ignore Established Principles Of Claim Construction

1. Claim Constructions Must Be Rooted In The Specification, Not Dictionary Definitions

Dr. Jang’s proposed claim constructions violate well-settled principles of claim construction.⁸ Most notably, Dr. Jang has proposed claim constructions that

⁸ Claim construction is an issue of law to be decided by the Court, rather than the jury. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc); *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). The point of reference for this analysis is how a person of ordinary skill in the art would have understood claim terms at the time of the invention – *i.e.*, the effective date of the filing of the patent application. *Pfizer, Inc. v. Teva Pharms., USA, Inc.*, 429 F.3d 1364, 1372-73 (Fed. Cir. 2005); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). Dr. Squire has opined that the pertinent art with respect to the Jang patents is intraluminal implants. (Squire Decl. ¶ 12.) A person of ordinary skill in the art, as of April 26, 1996, would have been: (1) a physician specializing in radiology, cardiology, cardiovascular surgery or some related discipline, with training, experience and/or

1 have little if any basis in the specification – the part of the patent that describes and
2 depicts the claimed invention. Recent Federal Circuit case law has emphasized
3 that “the claims ‘must be read in view of the specification, of which they are a
4 part.’” *Nystrom v. Trex Co.*, 424 F.3d 1126, 1142 (Fed. Cir. 2005) (quoting
5 *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en
6 banc)). Indeed, the specification is usually “dispositive” – “it is the single best
7 guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315; *accord*
8 *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1360 (Fed.
9 Cir. 2004) (“In most cases, the best source for discerning the proper context of
10 claim terms is the patent specification wherein the patent applicant describes the
11 invention.”); *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1478
12 (Fed. Cir. 1998) (“The best source for understanding a technical term is the
13 specification from which it arose, informed, as needed, by the prosecution
14 history.”); *Vitronics Corp. v. Conceptiontronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir.
15 1996) (“Usually, [the specification] is dispositive; it is the single best guide to the
16 meaning of a disputed term.”).

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Rather than root his proposed claim constructions in the specification,
however, Dr. Jang appears to be relying largely on broad definitions culled from

familiarity applying principles of mechanical or biomedical engineering or
materials science; or (2) an engineer having at least a bachelor’s degree in
mechanical or biomedical engineering or materials science with experience in the
design of, and requirements for, implantable medical devices. (Squire Decl. ¶ 13.)

1 non-technical dictionaries. . In *Phillips*, the Federal Circuit rejected this approach
2 to claim construction because it broadens the claim to encompass more than what
3 the inventor originally conceived:
4

5 Dictionaries, by their nature, provide an expansive array of definitions.

6 General dictionaries, in particular, strive to collect all uses of particular
7 words, from the common to the obscure. By design, general dictionaries
8 collect the definitions of a term as used not only in a particular art field, but
9 in many different settings. In such circumstances, it is inevitable that the
10 multiple dictionary definitions for a term will extend beyond the
11 “construction of the patent [that] is confirmed by the avowed understanding
12 of the patentee, expressed by him, or on his behalf, when his application for
13 the original patent was pending.”
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17 *Phillips*, 415 F.3d at 1321-22 (quoting *Goodyear Dental Vulcanite Co. v. Davis*,
18 102 U.S. 222, 227 (1880)). As the Federal Circuit explained in *Phillips*, dictionary
19 definitions of claim terms such as “expansion column,” “connecting strut,” and
20 “connecting strut column” may be taken out of context: “The problem is that if the
21 district court starts with the broad dictionary definition in every case and fails to
22 fully appreciate how the specification implicitly limits that definition, the error will
23 systematically cause the construction of the claim to be unduly expansive.”
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26 *Phillips*, 415 F.3d at 1321.
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2. Dr. Jang May Not Advance Claim
Constructions That Would Render The Claims
Invalid

“The prosecution history, which we have designated as part of the ‘intrinsic evidence,’ consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.”⁹ *Phillips*, 415 F.3d at 1317; *see also Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003); *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1371-72 n. 4 (Fed. Cir. 2002); *Vitronics*, 90 F.3d at 1582; *Markman*, 52 F.3d at 979-80.¹⁰ Thus, it is error for the trial court, in interpreting the claims, not to consider the prior art of record. *Arthur A. Collins, Inc. v. N. Telecom Ltd.*, 216 F.3d 1042, 1044-45 (Fed. Cir. 2000).

An important purpose behind interpreting the claims in view of the prior art is to ensure that a proposed construction would not render the claims invalid. *See Phillips*, 415 F.3d at 1328 (in construing the claims, the trial court is encouraged to review prior art and to preserve claims’ validity by rejecting constructions that would encompass prior art); *see also Carman Industries, Inc., v. Wahl*, 724 F.2d

⁹ The prosecution history of the ‘021 patent is attached as Exhibit I to the Nilsson Declaration. The prosecution history of the ‘743 patent is attached as Exhibit J to the Nilsson Declaration.

¹⁰ In this regard, it must be emphasized that all but one of the prior art stents discussed above (the exception being the Lau stent) was cited during the prosecution of the Jang patents and, thus, constitutes intrinsic evidence for purposes of claim construction.

1 932, 937 n. 5 (Fed. Cir. 1983). In this context, the Federal Circuit has repeatedly
2 emphasized that, where a claim term is susceptible to multiple interpretations, it
3 should be interpreted in such a way as to sustain the claim's validity. *See Karsten*
4 *Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1384 (Fed. Cir. 2001); *Modine*
5 *Mfg. Co. v. United States Int'l Trade Comm'n*, 75 F.3d 1545, 1557 (Fed. Cir. 1996);
6 *Carman Industries*, 724 F.2d at 937 n. 5. As shown conclusively below, there can
7 be no ambiguity as to the clear delineation between the "expansion columns" and
8 "connecting strut columns" in the Jang patents. Under Federal Circuit precedent,
9 however, to the extent that there is any question, the Court should avoid a
10 construction (such as those proposed by Dr. Jang) that would render the claims
11 invalid over the prior art.
12

13
14 This is especially the case where, as here, the proponent of an overbroad
15 construction is the assignor of the patent. This is because an assignor of a patent is
16 precluded from maintaining a legal position that would undermine the validity of
17 the patent he assigned. *Westinghouse v. Formica*, 266 U.S. 342, 345-46 (1924). In
18 *Westinghouse*, the claim construction issue was whether the asserted claims were
19 limited to a "two-step" process. If they were so limited, the claims would be valid;
20 if not so limited, the claims would be invalid in view of prior art. *Id.* at 344-45.

21 The Supreme Court held that, in order to preserve the novelty of the claims, prior
22 art references must be considered, and they compelled a narrow construction of the
23 claims. In reaching this conclusion, the Supreme Court invoked the principle of
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1 assignor estoppel, which precludes one who has assigned the patent rights from
2 later attacking the value of that patent. The Supreme Court reasoned that, because
3 the assignor is estopped from “destroy[-ing] the patent,” “the state of the art may
4 be used to construe and narrow the claims of the patent, conceding their validity.”
5 *Id.* at 351. Thus, even though the claims did not explicitly recite “a two-step
6 process,” the Court held that they nonetheless required such a process, because –
7 without this limitation – “there was nothing novel ... [about the asserted claims] in
8 the field to which they applied.” *Id.* at 354; *see also Tate Access Floors, Inc.*, 279
9 F.3d at 1369 (recognizing that *Westinghouse*’s holding with respect to assignor
10 estoppel is “consistent with our case law that, if possible, claims are construed to
11 preserve validity”); *Diamond Scientific Co. v. Ambico, Inc.*, 848 F.2d 1220, 1226
12 (Fed. Cir. 1988) (an assignor “should not be allowed now to destroy those rights
13 [assigned] by derogating the patents’ validity”).

14 Although *Westinghouse* and its progeny involved situations in which an
15 assignor (accused of infringing the assigned patent) advocated a broad construction
16 in support of an argument as to the patent’s invalidity, their logic is equally
17 applicable to a situation in which an assignor such as Dr. Jang threatens the
18 patent’s validity by asserting an overly broad construction of the claims in an
19 infringement context. Like the assignors in these assignor estoppel cases, Dr. Jang
20 should not be permitted to destroy the value of the patents and claims he assigned
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1 to Boston Scientific by pressing for constructions that are so broad that they would
2 render the claims invalid.

3
4 **B. Analysis Of Disputed Claim Terms**

5 These settled principles dictate that the claim terms in dispute be accorded
6 the following constructions.
7

8
9 **1. An "Expansion Column" Is A Tubular Structure**
10 **Formed Solely By A Plurality Of Strut Pairs**
11 **Arranged In A Column Along The**
12 **Circumference Of The Stent**

13
14 **a. The "Expansion Column" Is Necessarily A**
15 **Tubular Structure**

16 Both Dr. Jang and Boston Scientific agree that the claimed expansion
17 columns consist of expansion pairs. Dr. Jang, however, objects to any construction
18 that describes how these expansion pairs are joined together so that the expansion
19 columns can perform the function it must perform. Every three-dimensional
20 diagram in the Jang patents shows that the expansion columns constitute tubular
21 structures (sometimes called "rings" in the patents¹¹).
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26 ¹¹ "Stent 10 is constructed of two to fifty or more expansion columns or rings 24
27 connected together by interspersed connecting columns 26." '021 patent, col. 5,
28 lines 46-48.

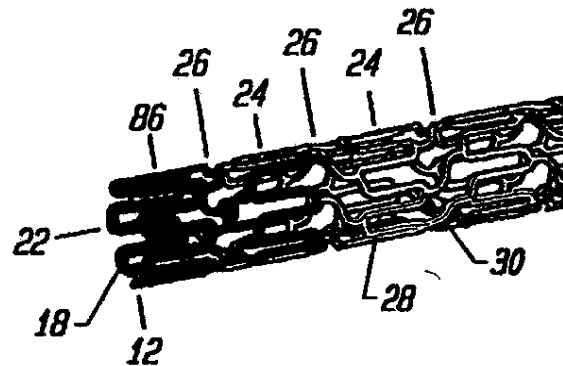


Figure 6B of the '021 Patent

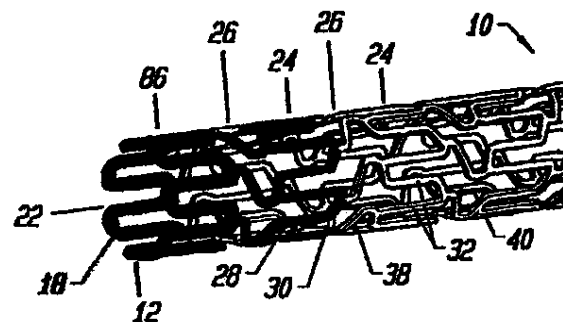


Figure 8E of the '021 Patent

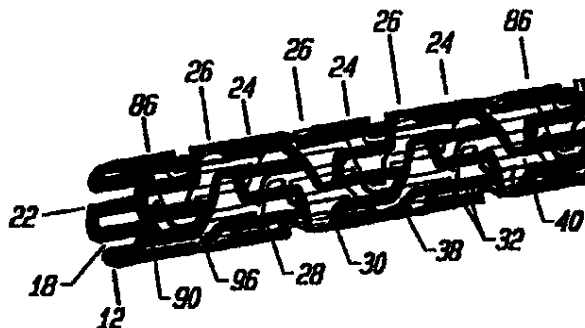


Figure 9B of the '021 Patent

The stent is formed of these "expansion columns," which are linked by "connecting columns" (as described more fully below): "The entire stent 10 when expanded is unitized into a continuous chain mesh of stretched expansion columns

1 24 and connecting columns 26.” ‘021 patent, col. 8, lines 39-41. These expansion
2 columns necessarily take a tubular shape in order to stretch circumferentially to
3 form the scaffolding that props up the vessel wall:
4

5 When the stent is expanded, each expansion column 24 becomes
6 circumferentially stretched, enlarging the space between struts. The
7 interlinking of expansion columns 24 by connecting struts 38 that have been
8 straightened through the expansion process gives the stent a high radial
9 support strength.
10

11 ‘021 patent, col. 8, lines 34-38. As Dr. James Squire has explained in his
12 declaration, the expansion columns in Jang’s patent must form tubular structures;
13 otherwise, they simply would not perform their function. (Squire Decl. ¶ 17.)¹²
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17 ¹² Dr. Squire is a professor of engineering at the Virginia Military Institute.
18 Between 1994 and 1999, he pursued doctoral studies at the Health Sciences
19 Technology Biomedical Engineering Laboratory, which is jointly operated by
20 Harvard Medical School and M.I.T. Between 1999 and 2000, he completed his
21 doctoral thesis, which examined the manner in which the stent mechanically
22 expands and its chronic effects upon the vascular wall (“Endovascular Stent
23 Expansion and Acute Vascular Injury”). He has also written and presented
24 numerous papers on issues related to stent design and stent expansion. His
25 declaration is offered to provide insight into the background of the technology at
26 issue and to explain how the invention claimed in the Jang patents actually
27 functions. Thus, under Federal Circuit case law, it is proper. *Phillips*, 415 F.3d
28 at 1318 (“We have also held that extrinsic evidence in the form of expert testimony
can be useful to a court for a variety of purposes, such as to provide background on
the technology at issue, to explain how an invention works, to ensure that the
court’s understanding of the technical aspects of the patent is consistent with that
of a person of skill in the art, or to establish that a particular term in the patent or
the prior art has a particular meaning in the pertinent field.”).

b. **The “Expansion Column” Is Composed
Solely Of Expansion Strut Pairs**

Boston Scientific and Dr. Jang also disagree as to whether the claimed “expansion column” can contain structural members – *i.e.*, struts – other than those in the “expansion strut pairs.” The Jang patents are quite clear that the expansion column is made of expansion strut pairs, not other kinds of struts:¹³

A plurality of the first expansion strut pair form a first expansion column....

A plurality of the second expansion pair form a second expansion column....

A plurality of the third expansion strut pair form a third expansion column.

‘743 patent, Col. 3, lines 40-41, 46-48, 61-62. Nowhere do the Jang patents even hint that an expansion column can contain the only other kind of strut identified in the claims – a “connecting strut.”

It is important to note, in this regard, that the preceding definition of “expansion column” is drawn, not from a description of a particular embodiment, but from the “Summary of the Invention.” *See C.R. Bard, Inc. v. United States Surgical Corp.*, 388 F.3d 858, 864-66 (Fed. Cir. 2004) (explaining that statements describing the invention in the Summary of Invention are particularly likely “to

¹³ The claim language itself (as well as each of the party’s proposed constructions) provides that the “expansion strut pair” includes “joining struts” as well as “expansion struts.” The parties have agreed that a “joining strut,” to the extent that it requires construction, can be construed as “a strut that couples two adjacent expansion struts within an expansion strut column.” It thus differs from a “connecting strut,” which connects separate expansion strut pairs in different expansion columns.

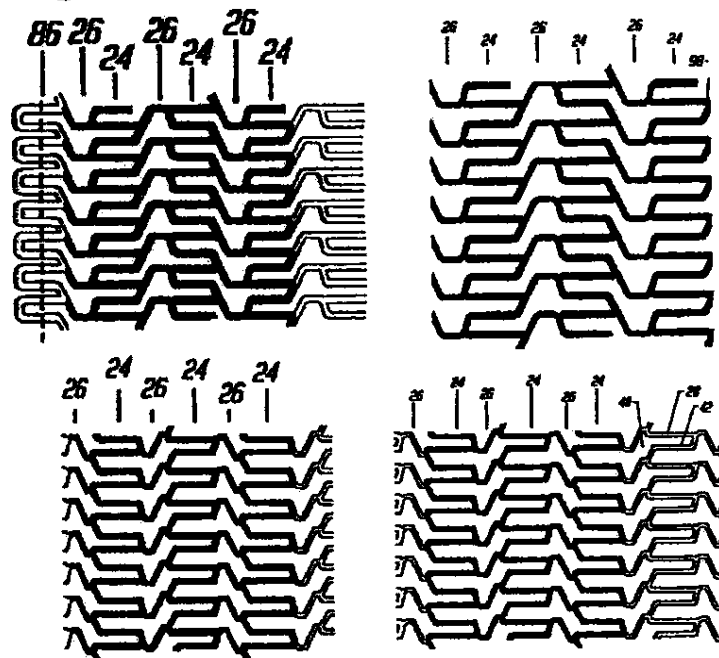
1 support a limiting definition of a claim term” insofar as they “describe the
2 invention as whole,” rather than a mere embodiment); *Bell Atlantic Network Servs.*
3 *Inc. v. Covad Communications Group*, 262 F.3d 1258, 1275 (Fed. Cir. 2001)
4 (where summary of invention defined term to include limitation, same term in
5 claim was properly interpreted to include limitation); *SciMed Life Systems, Inc. v.*
6 *Advanced Cardiovascular Systems, Inc.*, 242 F.3d 1337, 1343 (Fed. Cir. 2001)
7 (characterization of “invention” in summary of invention as having particular
8 configuration was “strong evidence” that the claimed invention required that
9 configuration). This definition is, moreover, consistent with every description of
10 “expansion column” in the patents.¹⁴
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20 ¹⁴ “Expansion struts 28 are joined together by joining struts 30 to form a plurality
21 of expansion strut pairs. Expansion strut pairs have a closed end 34 and an open
22 end 36. Additional joining struts 30 join together expansion struts 28 of adjacent
23 expansion strut pairs 32, such that expansion struts 28 are joined alternately at their
24 proximal and distal ends to adjacent expansion struts 28 to form expansion
25 columns 24. Each expansion column 24 contains a plurality, typically eight to
26 twenty, twenty to sixty, or larger of expansion struts.” (‘743 patent, col. 5, lines
27 29-38.) *See also* ‘743 patent, col. 5, lines 14-15 (“Expansion columns 24 are
28 formed from a series of expansion struts 28, and joining struts.”); ‘743 patent, col.
8, lines 18-21 (“Each expansion column 24 consists of twelve expansion struts 28
joined alternately at their proximal and distal ends by joining struts 30 forming six
expansion strut pairs 32.”).

1 **2. A “Connecting Strut Column” Is A Column**
2 **Formed Solely Of A Plurality Of Connecting**
3 **Struts Unattached To Each Other And Arranged**
4 **Along The Circumference Of The Stent**

5 **a. The “Connecting Struts” In The Claimed**
6 **“Connecting Strut Columns” Are**
7 **Unattached To Each Other**

8 As described above, a basic principle of stent design is that expansion
9 columns consist of expanding members that are attached to each other to create the
10 scaffolding for the vessel wall; connecting columns consist of more flexible
11 members that are not attached to each other. If the connecting struts in a
12 connecting column were attached to one another, they would work to resist recoil
13 from the vessel wall, in effect becoming an expansion column. (Squire Decl. ¶
14 24.) This fundamental structural distinction between “expansion columns” and
15 “connecting columns” figured repeatedly in the prior art. In the patents at issue,
16 Dr. Jang did nothing to alter it. Indeed, every single figure in the Jang patents that
17 shows “connecting columns” (always labeled “26”) shows that the connecting
18 struts forming those columns are not connected to each other, but rather (like prior
19 art designs) connect the “expansion columns” (always labeled “24”) on either side
20 of them.
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There is not even a suggestion in the Jang patents that the Jang stent could possibly depart from this fundamental architecture. Federal Circuit precedent thus

1 establishes that the claims cannot be read to have a broader meaning. The Federal
2 Circuit's decision in *Nystrom*, 424 F.3d at 1143 is instructive. In *Nystrom*, the
3 patent concerned a particular kind of patio or deck structure, and the claims recited
4 a "board" as part of that structure. Although the dictionary definition of "board"
5 arguably encompassed "boards" made of varying materials, and although the
6 patentee never explicitly stated that his claims did not cover boards of other
7 materials, the Federal Circuit nonetheless emphasized the fact that the only
8 "board" described and disclosed in the patents was a board cut from a wooden log:
9

10 Nystrom consistently used the term "board" to refer to wood cut from a log.
11

12 Although there was no clear disavowal of claim scope, there was nothing in
13 the intrinsic record to support the conclusion that a skilled artisan would
14 have construed the term "board" more broadly than a piece of construction
15 material made from wood cut from a log.
16

17 *Id.* at 1145. Because "[t]his context [was] maintained throughout the written
18 description," the Federal Circuit held that the patentee was not entitled to a broader
19 range of meaning. *Id.* at 1143; accord *AquaTex Indus., Inc. v. Techniche*
20 *Solutions*, 419 F.3d 1374, 1380 (Fed. Cir. 2005) (although claim reciting "fiberfill"
21 did not limit term to natural materials, "the context of the specification 'makes
22 clear that the patentee did not intend the term [fiberfill] to encompass' natural
23 materials" (citation omitted)); see also *Snow v. Lake Shore & Mich. S. Ry. Co.*, 121
24 U.S. 617, 629-30 (1887) ("It is not admissible to adopt the argument made on
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1 behalf of the appellants, that this language is to be taken as a mere
 2 recommendation by the patentee of the manner in which he prefers to arrange these
 3 parts of his machine. There is nothing in the context to indicate that the patentee
 4 contemplated any alternative for the arrangement of the piston and piston-rod”),
 5 *quoted and cited with approval in Nystrom*, 424 F.3d at 1146. For the same
 6 reasons, Dr. Jang should not be permitted to assert that his “connecting columns”
 7 possess a broader range of meaning than disclosed in his patents.
 8

11 **b. The “Connecting Strut Columns” Do Not**
 12 **Contain Expansion Struts Or Expansion**
 13 **Strut Pairs**

14 Nor can Dr. Jang justifiably assert that the claimed “connecting strut
 15 columns” may contain other structural elements – *i.e.*, expansion struts and/or
 16 expansion strut pairs. The Jang patents establish unequivocally that the
 17 “connecting strut columns” contain “connecting struts,” not “expansion struts”
 18 (which are contained in the “expansion columns”). *See* ‘021 patent, col. 6, lines
 19 14-16 (“Connecting struts 38 connect adjacent expansion columns 24 forming a
 20 series of interspersed connecting strut columns 26 each extending around the
 21 circumference of stent 10.”); col. 3, lines 40-41, 46-48, 54-57, 61-62 and col. 4,
 22 lines 2-5.¹⁵ As demonstrated in Figure 8, *supra*, and the other Figures reproduced
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 27 ¹⁵ “A plurality of the first expansion strut pair form a first expansion column.... A
 28 plurality of the second expansion pair form a second expansion column.... A
 plurality of the first connecting strut form a first connecting strut column that

1 above, there is not a single depiction of the Jang stent that shows anything but
2 “connecting struts” in the claimed “connecting strut columns.” Accordingly, Dr.
3 Jang cannot assert a broader meaning for “connecting strut column,” under which
4 the claimed column could include “expansion struts” or “expansion strut pairs.”
5

6
7 **c. Dr. Jang’s Proposed Constructions Erase**
8 **The Distinction Between “Expansion**
9 **Columns” And “Connecting Strut**
10 **Columns”**

11 In taking the position that a “connecting strut column” can contain
12 “expansion struts,” and that its members can be attached to one another, Dr. Jang is
13 effectively erasing any distinction between a “connecting strut column” and an
14 “expansion column.” This can be illustrated with reference to the early Palmaz
15 mesh stent, described earlier.
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24 couples the first expansion column to the second expansion column.... A plurality
25 of the third expansion strut pair form a third expansion column.... A plurality of
26 the second connecting strut form a second connecting strut column that couples the
27 second expansion column to the third expansion column.” These definitions are
28 from the “Summary of the Invention,” and thus are dispositive under the
authorities cited above. *See supra* § III.B.1.b.

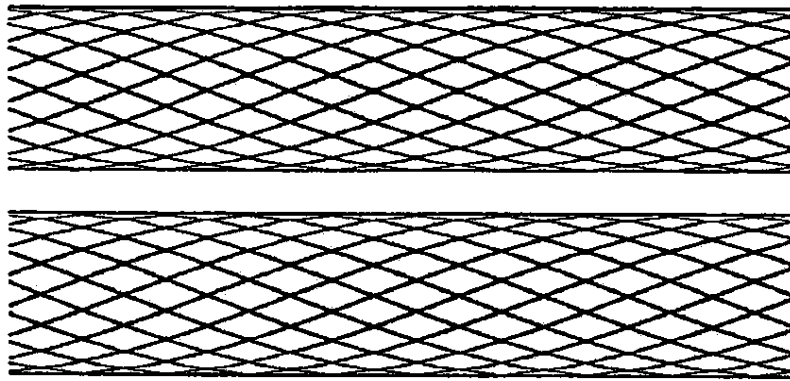


Figure 10

In the first version, the blue-highlighted struts are members of a “connecting strut column”; in the second the very same struts (now highlighted in red) are expanding elements. Under Dr. Jang’s proposed construction, either would be correct. The claim term “connecting strut column” thus becomes meaningless.¹⁶

In taking this approach, Dr. Jang violates a basic canon of claim construction – namely, that each claim term should be interpreted to have its own meaning and scope. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950-51 (Fed. Cir. 2006) (“claims are interpreted with an eye toward giving effect to all terms in the claim”). This is because each claim term must be interpreted, not in a vacuum, but with reference to other claim terms in the claim. *See ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding

¹⁶ This construction is further made possible by Dr. Jang’s outlandish construction of “connecting strut,” which is addressed in more detail below. Dr. Jang asserts that the connecting strut need not connect expansion columns that are next to each other. The “connecting strut” need only connect two expansion columns, anywhere on the stent.

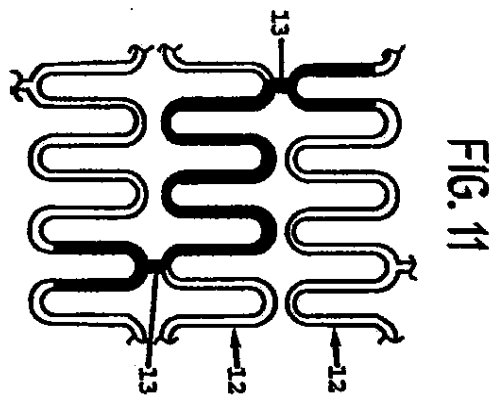
1 words of the claim also must be considered in determining the ordinary and
2 customary meaning of those terms"). To the extent there are differences between
3 the terms, those differences are presumed to be meaningful. *Nystrom*, 424 F.3d at
4 1143 (citing *Tandon Corp. v. United States Int'l Trade Comm'n*, 831 F.2d 1017,
5 1023 (Fed. Cir. 1987)). Dr. Jang's proposed construction, on the other hand,
6 would erase any meaningful distinction between an "expansion column" and a
7 "connecting strut column."
8

10
11 **d. Dr. Jang's Proposed Construction Would**
12 **Expand The Claims To Cover The Prior**
13 **Art**

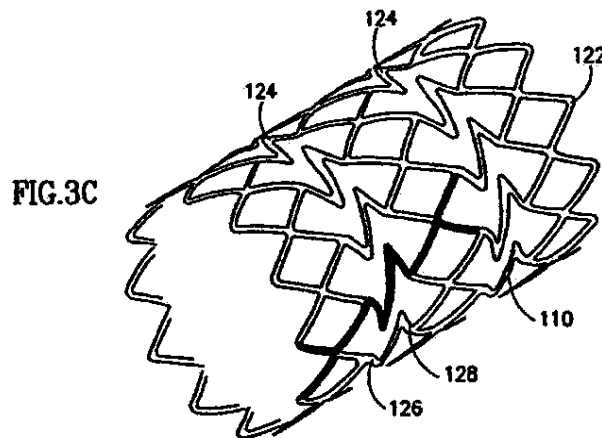
14 Dr. Jang's proposed construction of "connecting strut column" leads to an
15 even graver dilemma, as suggested by the preceding application of the construction
16 to the Palmaz mesh stent. Because Dr. Jang's proposed construction collapses the
17 structural distinction between connecting struts and expansion struts, and between
18 expansion columns and connecting columns, it broadens the claims to cover prior
19 art stents, even ones with very different architectures. This is because, if a
20 connecting strut column can include members attached to each other, and if it can
21 contain expansion struts and expansion strut pairs, then the connecting strut
22 column will invariably contain what can be called a "non-parallel" intermediate
23 section, and a connecting strut within the columns can always be said to attach to
24 two expansion pairs with offset longitudinal axes. As noted above, these were
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1 important novel features in the asserted claims. Nonetheless, under Jang's
 2 proposed construction, many of the prior art references discussed above could be
 3 read to have these same features.
 4

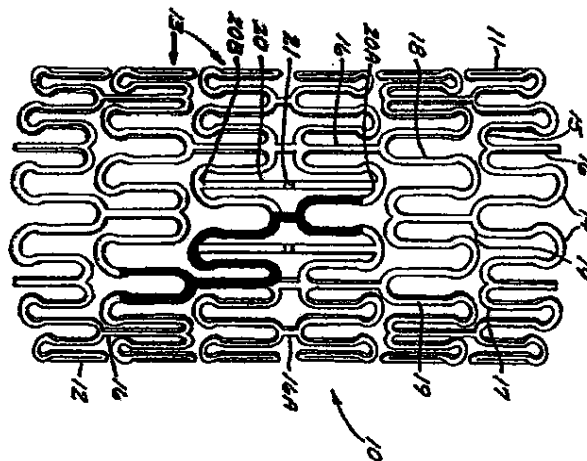
5 For example, under Dr. Jang's proposed construction of "connecting strut
 6 column," claim 1 of the '021 patent would cover the stent described and claimed in
 7 the Lau patent. As shown below, the Lau stent would have a first expansion pair in
 8 a first expansion column, with a "connecting strut" in a connecting columns (the
 9 connecting strut appearing to have a non-parallel intermediate section), and the
 10 connecting strut would attach to a second expansion pair in a second pair with an
 11 offset longitudinal axis.
 12
 13



21 Similarly, under Dr. Jang's proposed construction, claim 1 of the '021 patent could
 22 be tortured so as to appear to cover the Pinchasik stent (despite the fact that
 23 Pinchasik employed closed, diamond-shaped expansion elements):
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It would also cover the Orth Stent:



Under the authority cited above, this simply is not permissible. In order to obtain his patents, Dr. Jang attested in an oath to the Patent Office that his invention was not previously known or previously described in any publication in any country. To the extent there is any ambiguity as to whether the claimed “connecting strut columns” can contain expansion elements or connecting struts

1 that are attached to each other (and Boston Scientific believes there is not), the
2 Court should resist Dr. Jang's invitation to adopt claim constructions that would
3 render the patent claims disclosed by, or obvious under, the prior art and, thus,
4 invalid. *See Phillips*, 415 F.3d at 1328. As the *Westinghouse* case suggests, this is
5 especially the case where, as here, Dr. Jang has assigned the patents in question to
6 Boston Scientific. *Westinghouse*, 266 U.S. at 345-46 (assignor of patent is
7 precluded from maintaining legal position that would undermine validity of patent
8 assigned).

11
12 **3. A "Connecting Strut" Is A Strut That Connects**
13 ***Adjacent Expansion Columns***

14 The Jang patents clearly show that each "connecting strut" connects adjacent
15 expansion columns. In every figure in the patents, the "connecting strut" is
16 connecting adjacent expansion columns. Moreover, the patents explicitly recited
17 that "connecting struts 38 *connect adjacent expansion columns.*" '021 patent, col.
18 6, lines 14-16; *see also* '021 patent, col. 7, lines 35-36 ("Each connecting strut 38
19 joins a pair of expansion struts 28 in an expansion column 24 to an adjacent pair of
20 expansion struts 28 in an adjacent expansion column 24."). As noted above,
21 however, Dr. Jang has proposed a construction of "connecting strut" that would not
22 require the connected "expansion columns" to be adjacent to one another. Indeed,
23 Dr. Jang's proposed claim construction would allow the "connecting strut" to
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1 connect expansion pairs and expansion columns on entirely different parts of the
2 stent.

3
4 **4. The Court Should Adopt Boston Scientific's**
5 **Proposed Constructions of the Remaining**
6 **Limitations**

7 **a. "Distal" and "Proximal" Should Be**
8 **Defined According To Their Common**
9 **Meaning In The Art**

10 Almost all of the claims require a distinction between the "distal" and
11 "proximal" ends of the stent or of the various struts and strut pairs that form the
12 stent. Dr. Jang has proposed that these terms be defined, essentially, as "to the
13 right" and "to the left" respectively. The problem with this definition of course is
14 that, under it, the "distal" end of the stent can become the "proximal" end simply
15 by turning the stent around. The invention is, after all, a three-dimensional stent,
16 not a two-dimensional picture of it in a patent. Dr. Jang's proposed construction
17 also ignores the fact that "distal" and "proximal" have well-established meanings
18 in the medical device community. "Distal" means further from operator once the
19 stent has been mounted on the catheter. (Squire Decl. ¶ 29.) "Proximal" means
20 closer to the operator once the stent has been mounted on the catheter. *Id.*
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b. The First Expansion Strut of the First Expansion Pair in the First Expansion Column Must Be Circumferentially Offset from the First Expansion Strut of the Second Expansion Strut Pair in the Second Expansion Column.

Claim 1 of the '743 patent and claim 1 of the '021 patent each require that "the first expansion strut of the first expansion strut pair in the first expansion column [have] a longitudinal axis offset from a longitudinal axis of the first expansion strut of the second expansion strut pair in the second expansion column." In particular, Dr. Jang has proposed that "longitudinal axis" be defined as "an imaginary line running lengthwise through the center of an object." The self-evident problem with this definition is that a line can run through the center of an object at angle and from any direction. Dr. Jang has further proposed that "offset" be defined to mean that the expansion struts' longitudinal axes be "circumferentially *or vertically*" offset. In the context of three-dimensional, physical object such as a stent, "vertical" (like "left" or "right" is a meaningless concept.

Boston Scientific has proposed a much more precise definition, one that is not subject to the vagaries of finding an "imaginary line" or two-dimensional constructs like "vertically offset." Boston Scientific proposes that the limitation be interpreted to mean that "the first expansion strut of the first expansion pair in the first expansion column is circumferentially offset from the first expansion strut of

1 the second expansion strut pair in the second expansion column.” Dr. Jang’s
2 counsel has conceded that this interpretation is accurate but has indicated that it is
3 too abstruse for a juror to understand. Boston Scientific is confident that the Court,
4 counsel and the parties’ experts will be able to explain what it means for two struts
5 to be “circumferentially offset.”
6

7
8 **c. “Radius Of Curvature” Means “A Smooth**
9 **Curve”**

10 A number of the dependent claims at issue require that one or more sections
11 of the connector struts possess a “radius of curvature.” In describing what is meant
12 by this term, the Jang patents explain that “[t]he joints between segments of
13 connecting strut 38 are curved forming a smooth rounded shape.” ‘021 patent, col.
14 3, lines 11-13. Thus, Boston Scientific has proposed that “radius of curvature” be
15 construed to mean “a smooth curve.” It is not clear whether Dr. Jang will propose
16 a construction of this term, but any broader construction (such as one that would
17 countenance a “sharp curve”) is unsupported.¹⁷
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26 ¹⁷ Previously, Dr. Jang proposed that “radius of curvature” be construed so as to
27 encompass “a sharp curve,” so as to encompass a disjointed angle. As Dr. Squire
28 has pointed out, because such an angle would have a radius of curvature of zero,
this would render the limitation meaningless. (Squire Decl. ¶ 31.)

1 **CONCLUSION**

2 For the reasons set forth above, Boston Scientific respectfully requests that
3
4 the Court reject Dr. Jang's proposed claim constructions and adopt those proposed
5 by Boston Scientific.

6
7 Dated: May 5, 2006

HOWREY LLP

8
9
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12 Matthew M. Wolf

13 Edward Han

14 John Nilsson

15 Attorneys for Defendants

16 *Boston Scientific Corporation and*

17 *Scimed Life Systems, Inc.*
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PROOF OF SERVICE

I, Deborah Fritts-Rodriguez, declare as follows:

I am employed in the County of Los Angeles, California. I am over the age of eighteen years and not a party to the within action. My business address is 550 South Hope Street, Suite 1100, Los Angeles, California 90071. Upon this day, I served a copy of the following document:

**DEFENDANT BOSTON SCIENTIFIC CORP. AND SCIMED, INC.'S
OPENING CLAIM CONSTRUCTION BRIEF**

on all interested parties through their attorneys of record listed below in the manner shown below:

☒ **VIA FIRST CLASS MAIL** (CCP §§ 1012, et seq.). I am readily familiar with the firm's practice of collection and processing for mailing. Under that practice it would be deposited with the U.S. postal service on that same day as shown on this declaration with postage thereon fully prepaid at Los Angeles, California in the ordinary course of business.

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☐ **BY FACSIMILE** By sending a copy of said document by facsimile machine for instantaneous transmittal via telephone line to the offices of each addressee.

☐ **VIA HAND DELIVERY/PERSONAL SERVICE** (CCP §§ 1011, et seq.). I directed a courier to personally deliver said document(s) to each addressee.

☐ **VIA FEDERAL EXPRESS OVERNIGHT/NEXT BUSINESS DAY DELIVERY SERVICE** (CCP §§ 1013). I placed in an envelope, properly labeled, and caused to be deposited into a Federal Express pick-up receptacle as per the regular practice of this office.

FEDERAL: I declare under penalty of perjury that I am employed in the office of a member of the bar of this Court at whose direction the service was made and that the foregoing is true and correct.

Executed on May 5, 2006 at Los Angeles, California.


Deborah Fritts-Rodriguez

EXHIBIT E

REDACTED